**A Study on Knowledge, Attitude and Practice of Immunization Among Auxiliary Nurse Midwives Attending Village Health Nutrition Day**

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**Introduction**

As we know that immunization is the child’s right and Prevention of diseases is the need of the day. Immunization is one of the most cost-effective interventions to prevent a series of major illnesses, particularly in environments where children are undernourished and die from preventable disease. It is one of the best indicators to evaluate the health outcomes and services distributed across social and economic groups. Ever since the launch of EPI in 1978 and Universal Immunization Programme (UIP) in 1985 with promotion through Child Survival and Safe Motherhood (CSSM) program and RCH in 1997 there has been considerable progress in control of vaccine preventable diseases, in spite of this still large number of children continue to be afflicted with vaccine preventable diseases every year4-8. It prevents 2 million deaths per year worldwide however; 2.5 million deaths a year continue to be caused by vaccine preventable diseases, mainly in Africa and Asia among children less than 5 years old1-2-3. NFHS-3 reported that only 43.5% of children in India received all of their primary vaccines by 12 months of age. Recent estimates suggest that approximately 34 million children are not completely immunized with almost 98% of them residing in developing countries.3 In response to challenges in global immunization, WHO and UNICEF developed the Global Immunization Vision and Strategy (GIVS), launched in 2006. GIVS is the first ever ten-year (2006-2015) framework aimed at controlling morbidity and mortality from vaccine-preventable diseases and helping countries to immunize more people, from infants to seniors, with a greater range of vaccines.1 The issues of vaccine procurement is its storage, transport and administration, and factors such as knowledge, attitude and practices of health workers contribute to success or failure of immunization program.5-6-8

Given this background, it was decided to conduct a study among ANM attending VHND, about knowledge, attitude and practices regarding immunization.

**Objective:**

To assess the Knowledge, Attitude and Practices about immunization among Auxiliary Nurse Midwives who attained Village Health Nutrition Day.

**Methodology:**

**Study type**: Cross-sectional study

**Study Area**: 20 villages of Talegaon Primary health centre area of wardha district, Maharashtra India.

**Study period:** July 2011 to August 2011.

**Data collection**: All VHND were attended by the chief investigator and interview with ANM was conducted using Semi structured, pre-designed and pre-tested questionnaire.

**Data Analysis**: Data entered and analyzed using EPI-info 3.5.3 software.

**Results:** Total 20 VHND visited and ANMs were interviewed. Among them only 65% of the ANMs knew the dose of BCG correctly and only 75% of the ANMs knew the route of BCG. Only 90% of the ANMs knew the actual DPT site, about Measles vaccine only 79% of the ANMs knew about rout and 95% knew about actual site vaccination.

**Table 1**. **knowledge regarding proper dose and route about vaccination among ANM**

|  |  |  |
| --- | --- | --- |
| S.No. | **Knowledge of vaccine** | **Percentage** |
| 1. | **BCG Dose** | **65** |
| 2. | **BCG Route** | **75** |
| 3. | **DPT Route** | **85** |
| 4. | **DPT Site** | **100** |
| 5. | **Measles Route** | **80** |
| 6. | **Measles Site** | **85** |

**Table 2**. **Knowledge, Attitude and Practice of Immunization among ANM**

|  |  |  |
| --- | --- | --- |
| 1 | **A fully immunized child is one who has received BCG, DPT/Polio-1&2 ,Measles and Vit-A before the first birthday.** | **Percentage** |
|  | Yes | **10%** |
|  | No | **90%** |
| 2. | **What do you do with T- series vaccines (DPT, DT ,TT, Hep B) that are frozen?** |  |
|  | a. Discard and report | **80.0%** |
|  | b. Keep them in the cold chain | **5.0%** |
|  | c. Warm them and use them as quickly as possible | **15.0%** |
| 3. | **Diluent supplied with the vaccine should be stored in ILR at least 24 hrs before use to ensure that vaccine and diluent are at the same temp when reconstituted.** |  |
|  | Yes | **15.%** |
|  | No | **85%** |
| 4 | **How many vials of Measles vaccine will you carry to immunize 15 infants in a village?** |  |
|  | 3 | **65%** |
|  | 4 | **35%** |
| 5. | **Reconstituted BCG and Measles vaccines should be discarded after how many hours?** |  |
|  | 2 | **73.7%** |
|  | 3 | **10.5%** |
|  | 4 | **15.8%** |
| 6 | **How can you track drop out children?** |  |
|  | 1. Immunization registration | **75%** |
|  | 1. Tickler box/ bag | **25%** |
| 7 | **How will you dispose off AD syringes after use?** |  |
|  | 1. Burn it in open air | **15.8%** |
|  | 1. Cut needle in hub cutter and collect syringe in red bag and send to PHC for disinfection and disposal. | **68.4%** |
|  | 1. Throw in general waste/Black bag | **15.8%** |
| 8. | **Drop out children are those who have never received any immunization** |  |
|  | Yes | **15%** |
|  | No | **85%** |
| 9 | **If a child comes with mild fever and diarrhoea, should you give immunization?** |  |
|  | Yes | **25%** |
|  | No | **75%** |

**Table-3: Practices regarding immunization among Immunization**

|  |  |  |
| --- | --- | --- |
| **S. No.** |  | **Percentage** |
| 1. | **Whether** **Batch NO. & Expiry Date of Vaccine recorded?** |  |
|  | Yes | **95** |
|  | No | **05** |
| 2. | **Whether spirit allowed to dry before vaccination of killed vaccine?** |  |
|  | Yes | **65** |
|  | No | **35** |
| 3. | **Whether 0.1ml AD syringe used for BCG vaccination?** |  |
|  | Yes | **100** |
|  | No | **0** |
| 4 | **Whether normal saline used for cleaning the skin before BCG and Measles vaccination**? |  |
|  | Yes | **95** |
|  | No | **05** |
| 5. | **Whether DPT & Hep-B given on different sites?** |  |
|  | Yes | **100** |
|  | No | **0** |
| 6. | **Whether Vit-A given along with Measles vaccination?** |  |
|  | Yes | **95** |
|  | No | **05** |
| 7. | **Whether Ice-pack applied on the vaccination site after vaccination?** |  |
|  | Yes | **35** |
|  | No | **65** |
| 8. | **Whether advised mother regarding adverse affect of vaccination ?** |  |
|  | Yes | **55** |
|  | No | **45** |
| 9. | **Whether advised mother regarding next schedule of immunization?** |  |
|  | Yes | **85** |
|  | No | **15** |

Only 5% of the ANM were aware about definition of Fully Immunized children. 80% of them knew about the discarding techniques of T series vaccine. Only 15% of them were aware about the storage of reconstituent. Only 31% of them knew about the Measles vials requirement for immunizing 15 children and 74% of them knew when to discard reconstituted vaccine. 68% of them knew about dispose off techniques of AD syringes after use. Only 11% of them knew about drop out children and 74% of them knew about immunization during mild fever and diarrhoea. Only 95% ANMs were recorded batch number and expiry date of vaccination. All ANMs were used 0.1 ml AD syringes for BCG vaccination. Only 55% and 85% of them advised to mother regarding adverse affect of vaccination and next schedule of immunization respectively.

**DISCUSSION**- Despite all the efforts taken by the Government of India and international agencies, the proportion of unimmunized and partially immunized children remain quite high and we lag far behind the National socio-demographic goal of 85% coverage of all the vaccines10.The insufficient knowledge of the health workers requires sincere effort on the part of the health professionals and policy makers to plan and execute the IEC “information, education and communication” initiatives. This study therefore provides us an important insight into the existing level of awareness among the health workers and the areas that need attention.

**Conclusion**- We conclude that the knowledge of ANMs about vaccination is not completely adequate and this is reflected on the state of immunization. This refers to incomplete knowledge and inappropriate practice of ANMs. This would require appropriate training and education to the success of the programme.

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